Carlsbad PMPD Comments. By Rob Simpson and Helping Hand Tools (2HT), a California Non-profit Corporation

We join the parties in opposition to the project and add these comments to all previously filed opposition.

The Commission should make no decision until it has 5 members

"The Governor appoints the five members of the Commission to staggered five-year terms and selects a chair and vice chair from among the members every two years. The appointments require Senate approval. By law, one commission member must be selected from the public at large. The remaining commissioners represent the fields of engineering / physical science, economics, environmental protection, and law." http://www.energy.ca.gov/commission/overview.html

§ 25201. Qualifications of members

One member of the commission shall have a background in the field of engineering or physical science and have knowledge of energy supply or conversion systems; one member shall be an attorney and a member of the State Bar of California with administrative law experience; one member shall have background and experience in the field of environmental protection or the study of ecosystems; one member shall be an economist with background and experience in the field of natural resource management; and one member shall be from the public at large.

The Commission does not presently have members that represent the fields of environmental protection or economics.

This appears to have led to decisions that are devoid of these disciplines. This PMPD is another example.

The Decision should disclose what types of permits it actually encompasses or is in lieu of. It is unclear from the PMPD if it is a coastal permit, in lieu of a coastal permit or if a coastal permit is still required. If the Decision will be a coastal permit please disclose what steps the Commission has taken to comport with the Federal Coastal Zone Management Act, including the public notice and participation opportunity requirements. It is unclear from the PMPD if it is an air pollution permit, in lieu of an air pollution permit or if an air pollution permit is still required. It is unclear from the PMPD if it is a take permit (of endangered species), in lieu of a take permit or if a take permit is still required. It is unclear from the PMPD if the project is subject to some CPUC action or contingent on a Power Purchase agreement or if the developer can simply commence construction. Commissioners representing the field of environmental protection and economics are vital to these determinations.

The PMPD does not appear to require funding to be set aside for retirement of the facility. It does contain ample evidence of why funding should be set aside for retirement. California is littered with retired fossil fuel generated energy projects that have not been dismantled. Indeed the city of Carlsbad is proposed to be straddled with a new facility for even a chance of removal of the old facility. An economist could enlighten the Commission that; without requiring funding for the eventual demolition of a facility, a corporation would simply let the facility sit idle, spin it off to a dummy corporation and let it bankrupt itself to transfer responsibility to the public, or even better for the corporation, as in this case, leverage just the possibility of old facility removal to extort community acceptance of a new facility.

" A further assumption of suspect value is that EPS' owner will, once the generating equipment is retired, quickly move to remove it. It could just as easily sit in place for many years while the owner decides what to do next." 8.1-23

The Commission should require a provision that demands that funds to be set aside for decommissioning. The decision should include **a condition;**
Developer is to deposit $10,000,000 per year with the Commission until it can demonstrate adequate funds to dismantle the facility upon retirement.

The PMPD states "Is CECP a Public Utility?"

One of the issues raised by several parties, including the City of Carlsbad, is whether the word "Public" in the Pre-Amendment General Plan and zoning designations "Public Utility" includes a privately owned facility such as the CECP. The City of Carlsbad asserts that the phrase applies only to generating facilities owned by a public utility such as SDG&E.

Under the Pre-Amendment General Plan and zoning, we agree with the Applicant and Staff that "public utility" has a broader meaning than that advanced by the City. We should examine the function of the CECP not its ownership. The electricity it generates will be distributed by the same electric grid used by regulated utilities to distribute power from their utility-owned-generators to their customers. 8.1-17

The PMPD should be clear and state if the Commission considers the project to be a Public Utility. It should also be clear on the scope of the decision. Is each member of the public whose rooftop solar feeds back into the grid considered a Public Utility? What is the threshold? Is the project exempt from paying taxes and making a profit like a true Public Utility? Is the project subject to all the same limitations and regulations as a Public Utility or does it simply enjoy the benefits? I used the same public roads, as the post office, to deliver my tax payment; does that make me a Public Employee?

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Air Quality Concerns, Issues and Questions

The Commission has for years now been alerted by the community of air quality related negative health effects, including cancer clusters near the existing facility. In consideration of the public's comments and this accompanying record; The Commission should require local air quality testing prior to a Decision.

The proposed air pollution permit is built around imaginary and/or outdated emission estimates.

The analysis of the air quality emissions and impacts in the August 8, 2009 SDAPCD Final Determination of Compliance (FDOC) is so flawed that it does not show compliance with either the Clean Air Act or district rules, and cannot be used to determine impacts under CEQA. The FDOC underestimates future emissions from the proposed facility, and overestimates past emissions from the existing facility to create an artificially high emissions baseline.

The Baseline Analysis Is Flawed and Cannot Be Used to Determine Impacts under CEQA.

The baseline emissions in Footnote 7 on page 6.2-16 do not represent either existing environmental conditions at the site in 2007 or actual emissions from the plant during that five year period.

In determining whether operation of the facility will cause a significant impact on air quality, the SDAPCD creates baseline emissions by averaging emissions from units 1 through 3 back to 2002. CEQA Guidelines section 15125 dictates that baseline emissions are normally based on "physical environmental conditions . . . as they exist . . . at the time environmental analysis is commenced." The default period for this analysis is the two years prior to commencement of analysis.

SDAPCD fails to adequately explain why the period from 2005 to 2006 does not provide representative baseline emissions from the facility. Additionally, the data from 2002 and 2003 are so fraught with speculation, extrapolation, and estimates that they do not represent actual emissions. Furthermore, the emission factors, calculations and methodology chosen to estimate actual emissions are not the best information available, and in the case of several pollutants likely overestimate the actual emissions, creating an artificially high baseline.

<u>The 5 year baseline period cannot be used without a showing of unusual circumstances.</u>

Only in unusual circumstances is the longer baseline period employed. The analysis seems to suggest that it being hot in 2005 and 2006 constitutes an unusual circumstance. The analysis does not even contain an assertion that higher temperatures were the cause of lower emissions in 2005 and 2006. Neither does inherent variability in the energy industry constitute an unusual circumstance. Without further showing of unusual circumstances justifying the

longer period, then the baseline must be calculated using the conditions as they existed at the time environmental analysis commenced.

The emission factors, equations, and methodologies chosen are not identified, and critical information used in determining the baseline was not included in either the FDOC or the PMPD.

The SDACPD fabricated the figures in the table in footnote 7 by using unidentified emission factors presumably provided by the applicant. The footnote notes that the figures were determined through correspondence with the Encina project owner. If the determination of the baseline figures was based on this communication, all such communication must be included as part of this determination.

SDAPCD explains in great detail how they had several sources of emissions data from which to create the baseline. In several cases less representative and less reliable emissions figures were likely used to calculate the baseline instead of readily available and more reliable data. Actual emissions for the purpose of determining the baseline should be calculated using all available methods for estimating actual emissions, and the most conservative figure should be used to ensure that the project's impact on air quality is not underestimated.

The 2002 and 2003 data are so based on speculation and extrapolation as to be worthless.

Review of the FDOC shows that the emission estimates for 2002 and 2003 were even more conjured than the other data and must be discarded as inaccurate. The SCR was not installed yet in 2002 and early 2003, so emission estimates for these years is not based on actual emissions but are instead on the Rule 69 emission standard. This method of using allowable emissions rather than a true and honest estimate of actual emissions runs afoul of the ruling in Communities for a Better Environment v. SCAQMD (2010) 48 Cal.4th 310. The ruling in CBE states that permitted or allowable emissions cannot be used to determine the baseline. In this case, though actual fuel rates were used, the actual emission rate or emission factor for NOx was not known. Therefore, the NOx estimates for 2002 and pre-SCR 2003 do not represent actual emissions estimates and cannot be used to determine the baseline emission.

This type of flawed analysis of estimated actual emissions is not limited to NOx for 2002 and 2003. Unfortunately the only other information in the FDOC about how these figures were conjured is that the fuel rate was multiplied by "an appropriate emission factor." **These emission factors, their sources, and a justification as to why each emission factor is more "appropriate" than an alternative must be included in the FDOC or the baselines on which these emission factors are based will be challenged as arbitrary and capricious.**

The Daily and Annual Maximum Emissions Estimates Are Flawed.

Central to the calculation of future emissions is the issue of startup and shutdown emissions. The calculations for these emissions grossly underestimate actual maximum emissions.

The above calculations are dishonest and disingenuous in that the 300 hours of startup and shutdown are actually calculated using 300 22 minute periods of startup, not 300 full hours. In the case of shutdown the maximum emissions are calculated using 300 7 minute periods. (page 8 FDOC)

QUESTIONS:

Why were maximum daily emissions calculated using 6 hours of startup, 6 hours of shutdown, and 12 hours of normal operation?

Are these maximum permitted hours of startup and shutdown or arbitrary figures?

Would the facility be violating any permits if it started up for 8 hours, shutdown for 8 hours, and operated normally for 8 hours?

Similarly for maximum annual emission calculations, where did the 300 hours of startup and shutdown come from?

Why is the proportion of startup and shutdown hours compared to normal operation so much lower than the daily hours ratio?

If this is a peaker plant, shouldn't the maximum annual hours of startup and shutdown maximum reflect an aggregation of daily maximums (adjusted to include the 4100 hour limit)?

Are these 22 minute and 7 minute maximum startup and shutdown times enforceable under any permit condition?

The FDOC limits startups to 60 minutes and shutdowns to 30 minutes. Why are these maximum permitting times not used in calculating maximum emissions?

This section of the FDOC includes the phrase "as proposed by the applicant" to justify several figures with no further evidence or rationale as to why these figures are reasonable, or even a claim that the SDAPCD reviewed these figures for reasonableness. (page 39 FDOC) This is an example of the applicant writing their own permit, and adoption of their proposals without a showing of review or explaining the rationale is arbitrary and capricious.

These startup and shutdown times are described as "typical" in the FDOC. Typical startup and shutdown times, and "assumed" number of startups and shutdowns are not appropriate to calculate maximum annual emissions. Maximum permitted startup and shutdown events, with maximum, or at least conservative startup and shutdown times must be used to calculate the annual maximum estimated emissions.

Required LAER and BACT Analyses Are Flawed or Were Not Performed.

The District based it's BACT and LAER analyses on "information supplied by the Applicant and the District's experience with ongoing operations at a large combined-cycle power plant" rather than any mandated top-down BACT analysis or LAER requirements. (FDOC page 41).

LAER is an emission rate based on technical feasibility. Considering that a large proportion of emissions from the facility are emitted during startup and shutdown, appropriate technology and corresponding emission limits must be determined for these periods as well. Limiting the application of a LAER emission limit to normal operations contravenes the purpose of having strict rules for nonattainment areas.

Though several of the emission limits proposed as BACT (for NOx and CO, and especially for VOC, for example) are purported to be BACT limits, no BACT analysis was performed. No array of possible control technologies was proposed, no ranking by removal efficiency was performed, and therefore a top-down BACT analysis could not be performed. Several pages of the FDOC are used to explain why stricter achieved LAER and BACT limits for VOC are inapplicable in this case, and none of it is compelling. (FDOC pages 35-38) The facility should be subjected to real LAER analysis for VOC. In the alternative, the facility should be subjected to a real top-down BACT analysis.

Additionally, the BACT limit for VOC is for 70% load or higher, even though the facility is permitted to operate between 25% and 100% load, and will likely operate below 70% load. The facility must be subject to a BACT limit for all permitted loads. This situation is acknowledged in the section titled <u>Abnormal Events</u>. Emissions of several pollutants will be higher at lower operating levels, and these permitted and fully expected lower levels of operation are normal. These are not upsets or malfunctions, these are periods of normal operation that will result in higher emissions. The attempt in the FDOC to label these normal operations as abnormal and exclude them from BACT review is in violation of the Clean Air Act as no legitimate exclusion applies to these periods. A BACT emission rate must be determined for these periods through BACT analysis. The fact that the facility cannot meet the BACT level for 70% and higher load does not excuse the facility from BACT for these periods.

<u>Emission Reduction Credits From Other Sources Cannot Be Used to Avoid PSD.</u>

The FDOC attempts to use emission reduction credits from other sources to avoid PSD for NOx, SOx, VOCs, and PM. (page 27 FDOC). Only contemporaneous emission reductions at the facility can be considered in looking at emission increases for PSD purposes. The emissions increases at this facility trigger PSD for all of these pollutants.

The facility must be subjected to a MACT analysis.

The FDOC acknowledges that the facility is a major source of HAPs, but does not perform any MACT analysis.

The Commission is wasting a lot of resources attempting to license an unnecessary facility which the EPA has already demonstrated does not comport with the Clean Air Act. The EPA was clear in ceding to the lawsuits filed by the city of Carlsbad and myself. " In withdrawing this PSD applicability determination as moot, we also note that we have concluded that the analysis contained in it was made in error. As such, neither the overall determination nor the rationale and analysis contained therein can be relied upon to undertake actions related to the CECP or any other facility."
http://www.energy.ca.gov/sitingcases/carlsbad/documents/others/2011-07-18_California_Environmental_Protection_Agency_Letter_to_NRG_Energy_Inc_TN-61433.pdf

The "rationale and analysis" referred to by the EPA is the analysis completed by the San Diego Air Pollution Control District. It is quite simply unacceptable to use emission data from 2002, as a baseline for the existing facility, to appear to offset the emissions from the new facility. The current facility barely operates today as there is no demand for its product. I appealed the issue to the District 3 years ago. CEC staff intervened in the appeal and instructed the District that they did not have authority to hear the appeal at that time. Should the Commission wish to ignore the EPA instructions and "undertake actions related to the CECP" in reliance on the illegal baseline, then as soon as the Commission approves the Project the license will be ripe for Federal litigation. There is no construction of the Clean Air Act that the CEC can rely on in ignoring this law and the specific instructions from the EPA. If the CEC wishes to issue a license for this facility it should perform an Air Quality Impact Analysis using a contemporaneous baseline for existing facility emissions. The problem, of course, would be that the true potential emissions would demonstrate a significant unmitigated impact.

Air Quality table 9 demonstrates a new violation of the ambient air quality standards for Annual PM2.5 and then the following paragraph denies the violation. An economist or environmental protection member could enlighten the Commission that while 100% of the increment may not be a violation 101% is a violation. The Commission should mitigate or eliminate the new violation.

CEQA also does not permit use of an antiquated (2002) baseline for comparison.

The FDOC is expired.

Rule 17 of the San Diego SIP says:
" (a) An Authority to Construct shall expire and the application shall be cancelled

one-year from the date of issuance of the Authority to Construct. A period of more than one-year may be granted by the Air Pollution Control Officer if it is stated in the application, or in a letter to the Air Pollution Control Officer, and the Air Pollution Control Officer determines that the additional time is required for completion of the construction, or when a period of more than one-year is authorized by the Hearing Board for construction. The Authority to Construct shall expire and the application shall be cancelled upon the expiration of such construction period, but in any event not later than five years from the date of issuance of the Authority to Construct."

Rule 20.5 says "(c) Upon receipt of AFC for a power plant, the Air Pollution Control Officer shall conduct a Determination of Compliance review. This determination shall consist of a review identical to that which would be performed if an application for an Authority to Construct had been received for the power plant."

PSD

There is some disagreement among the parties about whether the CECP will be subject to a PSD permit for its GHG emissions. The PSD is a federal permit, issued either by the local air district under delegated authority or by US EPA, in either case not subject to the Energy Commission's. Some of the Intervenors argue that the Energy Commission cannot issue its certification until after the PSD permit is issued or a determination that no permit is required is made. (See, eg, the Center for Biological Diversity's brief dated January 10, 2012.)

AQ-SC11 Prior to the start of construction, the Project Owner shall provide proof of US EPA's approval of a Prevention of Significant Deterioration

(PSD) Permit for CECP or certification that no such permit is required.

Verification: The project owner shall provide a report of its progress toward

obtaining the PSD permit or the CPM CEMS data demonstrating compliance with this condition as part of monthly compliance reports."

A PSD permit is not always a Federal Permit. For instance when I litigated the Humboldt Bay Repower project permit, identified as a Federal PSD permit; the air district there subsequently determined that their PSD permit was actually a state permit. "The Permit was issued under state authority, not pursuant to a Federal Delegation"

http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/Unpublished~Final~Orders/D2E5A6BE12D982D88525752100678669/$File/Order%20Denying%20Review...45.pdf

The San Diego Air Pollution Control District made a decision on April 4, 2012 to commence issuing PSD permits as State permits **"WHEREAS**, pursuant to

section 40727 of the Health and Safety Code, the San Diego County Air Pollution Control Board makes the following findings:

(1) (Necessity) The adoption of proposed new Rule 20.3.1 is necessary to ensure timely and cost-effective application of federal Prevention of Significant Deterioration requirements by transferring administrative authority from U.S. EPA to the District; and amendments to Rules 60.1, 60.2, 1401 and 1410 are necessary in order to implement the federal Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, issued by U.S. EPA on June 3, 2010;" The PMPD should disclose if the Commission has authority over State issued PSD permits and what effect the new District rule has in this proceeding.

GREENHOUSE GAS

The PMPD states; " A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas

emissions as compared to the existing environmental setting . . . .

(3) The extent to which the project complies with regulations or requirements

adopted to implement a statewide, regional, or local plan for the reduction or

mitigation of greenhouse gas emissions"6.1-6 The PMPD statement contains no number (2)

The construction of the facility will result in greenhouse gas emissions. The Commission should demonstrate the actual amount of greenhouse gases to be emitted as a result of construction. The Commissions contents that; operation of the facility will cause a reduction in greenhouse gas emissions. That scenario should demonstrate that the facility operation must exceed the construction greenhouse gas emissions

The PMPD states; "Power plant construction involves vehicles and other equipment that emit GHG. The CECP's construction emissions are projected at 4,686 metric tons of CO2-equivalent GHG during the 25-month construction period. (Ex. 222, **Greenhouse Gas Table 2**, p. 4.1-106.)" This statement seems to ignore the concrete used in construction and so could be off by a couple million tons.

The Commission should review its own report; **OPTIMIZATION OF PRODUCT LIFE CYCLES TO REDUCE GREENHOUSE GAS EMISSIONS IN**

CALIFORNIA *Which states;* total life-cycle GHG emissions for cement and concrete amount to 11.8 Mt CO2 (3.2 Mt C).

http://www.energy.ca.gov/2005publications/CEC-500-2005-110/CEC-500-2005-110-F.PDF

It appears that solar projects have been subject to life cycle concrete production greenhouse gas analysis before the Commission. The Commission should either disclose why solar projects should be held to a higher standard or disclose and mitigate the actual Greenhouse gas construction impacts.

The Commission should adopt the SCQAMD approach. The PMPD states;

"SCQAMD has adopted a somewhat complicated tiered approach to determining the threshold of significance for GHG emission from operations (including amortized construction emissions).

Essentially, annual emissions greater than 10,000 MTCO2e per year are deemed potentially significant, though projects found to be consistent with a GHG emissions reduction plan are exempt from a numerical threshold."

SOLAR IS BACT

The Commission would set a bad example by allowing the project without requiring a solar component to begin to mitigate the project greenhouse gas impacts and as part of BACT for all pollutants. The PMPD admits; "Both solar and wind generation reduce or eliminate air pollutants" 3-17. The PMPD also states; "Its fast ramping capability will allow it to integrate renewable power from wind and solar sources" 8.1-21 but does not require any such resources to be developed. This nuanced alternative does not seem to be discussed in the PMPD.

The Palmdale Project included a Solar component. In response to my comments, the EPA acknowledged that the Palmdale solar component was BACT "As an integrated part of the Project with the ability to reduce GHG emissions, we consider the solar component to be part of the GHG BACT determination for the combustion turbines and associated heat recovery system."

http://www.epa.gov/region9/air/permit/palmdale/palmdale-response-comments-10-2011.pdf

The California Attorney General's Office;"**Addressing Climate Change at the Project Level** *states;* Install solar panels on unused roof and ground space and over carports and parking areas.
http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf

The Decision should disclose if the Commission is exempt from the EPA and Attorney Generals guidance and why a power project would not be required to integrate cleaner alternatives?

Air Quality Table 5, demonstrates that the construction impacts have the potential to worsen the existing violations of the PM10 and PM2.5 ambient air quality standards and are, therefore, potentially significant and require all feasible mitigation. 6.2-9 A solar component is feasible mitigation

The PMPD states; ""The power plant site would be located on the northeast portion of the existing 95-acre Encina Power Station (EPS)" 7.2-1

And

"central receiver solar thermal projects require approximately five acres per MW,3-17. So up to 19 MW of solar could be developed on the site. What consideration has the Commission given to the precedent set in Palmdale, EPA determination and the Attorney Generals guidance? The commission should require a solar component on this energy project. The Commission should also require wind turbines on the stacks. Done correctly they may also help minimize avian inferno deaths. The Decision should include **a condition, consistent with the Attorney Generals advice, the developer shall; "Install solar panels on unused roof and ground space and over carports and parking areas."**

The PMPD states; "In the San Diego area, the CAISO has "reliability must run" contracts with several old, less-efficient plants in part to provide ancillary services. (Ex. 222, p. 4.1-111.)" Could the CAISO, FERC, CPUC or others require that the facility operate more than the Commission Decision? It appears that most projects approved by the Commission subsequently modify their projects to pollute more than the original limits. The decision should disclose if the decision can be modified, the percentage of licenses that are subsequently modified to pollute more and if the Commission has ever denied a modification to pollute more. It appears that developers tell the Commission whatever it needs to hear to license pollution sources and then are given a free hand to modify their emissions. This would appear to be what the EPA identifies a sham permit. The Commission just approved a five year extension of the Blyth 2 license without environmental review. The Commission should disclose to the public how easy it is for a developer to extend their license.

BIOLOGICAL RESOURCES

The PMPD is silent regarding potential air pollution impacts to the adjacent special status species and Critical Habitats, it appears that no study was performed. It is a travesty to be at this point in these proceedings with no

consideration these impacts to the sensitive ecosystem surrounding the proposed facility.

One of the Federally recognized Endangered Species is the San Diego fairy shrimp *Branchinecta sandiegonensis.* The Commission should consider its own report titled; **IMPACTS OF NITROGEN DEPOSITION ON CALIFORNIA ECOSYSTEMS AND BIODIVERSITY**

Which states;

"Deposition hotspots include: Los Angeles-San Diego" vii

"Highly exposed vernal pool invertebrates include various taxa of fairy shrimp; Riverside fairy shrimp (*Streptocephalus woottoni*, mean 9 kg-N ha-1 yr-1), San Diego fairy shrimp (*Branchinecta sandiegonensis*, mean 8.2 kg-N ha-1 yr-1)" 51 (emphasis added)

"There is broad scientific consensus that atmospheric nitrogen deposition profoundly changes functioning of ecosystems, which can lead to losses of biological diversity in both terrestrial and aquatic ecosystems" 55

"Despite the complexities of N-deposition as a process extending from initial emissions through atmospheric transport and chemical transformations; dry-and wet-deposition; changes in ecosystem function, structure, and biodiversity; and cascading "downstream" effects, the ultimate solution is to greatly decrease emissions. Some of the nitrogenous pollutants of concern are primary pollutants (NH3, NOx, and N2O). Others are secondary pollutants (HNO3, NO3-particulates, and NH4+ particulates)." 55

The Commission should also consider its report

2007 ENVIRONMENTAL PERFORMANCE REPORT OF CALIFORNIA'S ELECTRICAL GENERATION SYSTEM

Impacts beyond the fence line of the project do impact biological resources for some projects, and additional compensation was required to offset those impacts. Some off-site impacts that resulted in additional habitat compensation are wetland impacts, protected species impacts, nitrogen deposition on sensitive habitats, and once-through cooling. The Roseville Energy Park project required additional compensation for impacts to wetlands, and Sunrise, Sunrise II, La Paloma, and Pastoria required compensation for impacts to protected species. The Metcalf Energy Center, Von Raesfeld Combined Cycle (Pico), and Los Esteros Critical Energy Center were shown to have nitrogen deposition impacts on sensitive habitats, which resulted in additional habitat compensation.

http://www.energy.ca.gov/2007publications/CEC-700-2007-016/CEC-700-2007-016-SF.PDF

Deposition impacts have been disclosed and mitigated in other proceedings and yet this project has been devoid of adequate consideration of this crucial issue. **The PMPD should be rejected on this basis**.

The Biological review is inadequate, including;

Page 4.2-31 of the FSA indicates that "The exhaust temperature would be approximately 363 degrees Fahrenheit immediately above the HRSG turbine stacks" The decision should disclose up to what height and plume diameter would plume temperature likely result in avian mortality? The facility would have the capability of transitioning from a safe flyover to an invisible inferno in 10 minutes. The intermittent nature of the plume and fast start capability of the emissions could result in increased avian mortality.

4.2-13 indicates; Collisions typically result when the structures are invisible (e.g., bare power lines or guy wires at night), deceptive (e.g., glazing and reflective glare in windows), or confusing (e.g., light refraction or reflection from mist)" The invisible plume to fits this description.

4.2-13 states "Collision rates generally increase .... when birds are startled by a disturbance or are fleeing from danger." The fast start turbine capability fits this description.

The PMPD states; “Because the proposed CECP exhaust stacks are significantly shorter than 350 feet (the height above which is considered dangerous to migrating birds), and shorter than the existing built environment (e.g., EPS exhaust stacks), and with implementation of Condition of Certification **VIS-4**, impacts resulting from bird collisions with CECP structures would be less than significant.” If the contention is that birds are protected from the new stacks by the existence of the old stack The Decision should disclose; what impact removal of the old stack represents?

The Commission should review a study of modern, high temperature, high velocity, intermittent, plumes on avian mortality. Such a study could demonstrate a significant negative effect, an increase in avian mortality ?

The Commission should study pollutant and potential pollutant accumulation in the lagoon.

The Commission should study deposition impacts of criteria and toxic emissions.

The Commission should study the impacts of ammonia emissions and the millions of gallons of vaporized water per day on biological resources?

To prevent electrocution 4.2-15 indicates; "The applicant would construct the proposed transmission lines according to APLIC's "raptor-friendly" guidelines. Specifically, the transmission lines would have a minimum of 5.5 feet between conductor wires." The California Brown Pelican has a 7 foot wingspan How would the 5.5 feet between lines prevent their electrocution.

It appears that the biologist visited the site in 2007. This is not be representative of today's conditions. Biological resources have changed since 2007. The Commission should update the biological assessment and utilize contemporaneous environmental reports.

The Commission should demonstrate the effects of potential Raptor perches in the planned tree canopy.

It is probable that pollution could have a different effect on plant and animal life than it has on humans. Has this been studied by the Commission?

Environmentally Sensitive Habitat Areas

Public Resources Code section 30240 (b) provides: "Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas."

The Agua Hedionda lagoon is adjacent to the CECP site, and there are several recreational resources within one mile of the CECP site. The **Biological Resources** section of this Decision provides a detailed analysis the CECP's compliance with this Coastal Act requirement. The **Visual Resources** section addresses the CECP's visual impacts on surrounding land uses (including recreational resources), and how the proposed CECP would comply with this section of the Coastal Act." 8.1-8

COASTAL ISSUES

The City of Carlsbad and some of the other parties assert that we cannot decide this matter until the Coastal Commission provides a formal report to us as described in Public Resources Code section 30413(d). (City Opening Brief pp. 2, 83 – 88; Terramar Opening Brief p. 36; Simpson Opening Brief p. 13.) That requirement, however, applies to proceedings under Public Resources Code section 25510 regarding Notices of Intention. This proceeding is instead an Application for Certification under Public Resources Code section 25519 et. seq. Pursuant to Public Resources Code section 30413(e) Coastal Commission participation in Energy Commission siting proceedings other than Notices of

Intention is discretionary. Even were the Coastal Commission to provide its advice, the Energy Commission is charged with making its independent determination regarding project compliance with the Coastal Act and other LORS. We need not wait for a Coastal Commission report before adopting this decision. 8.1-6

The CECP will use dry cooling technology, and thus does not require intake or outflow of ocean or lagoon water for once through cooling purposes; it will also not produce a thermal plume. The project will, however, require a maximum of 4.32 million gallons/day (mgd) of seawater for its industrial use and dilution purposes. 7.1-7

Is the elimination of the thermal plume a beneficial or negative impact? Has the Commission studied if sea life has adapted to the thermal plume and if its elimination would be a negative impact? It appears that the elimination of the thermal plume may be an unmitigated negative impact. If the Commission has not done so it should review a study which determines if the elimination of the thermal plume is a negative impact.

The Coastal Act establishes a comprehensive approach to govern land use planning along the entire California coast. The Coastal Act also sets forth general policies (Public Resources Code §30200 et seq.) that govern the Coastal Commission's review of permit applications and local plans. In the case of energy facilities, Section 30600 of the Coastal Act states: (a) Except as provided in subdivision (e), and in addition to obtaining any other permit required by law from any local government or from any state, regional, or local agency, any person, as defined in Section 21066, wishing to perform or undertake any development in the coastal zone, other than a facility subject to Section 25500, shall obtain a coastal development permit. Section 25500 specifically

identifies the Energy Commission's exclusive power to certify

sites for power generation facilities 50 MW or greater and

related facilities anywhere in the state.

Appendix A – 17

The Decision should include a statement that the Decision is (or is not) a Coastal Permit. And, if it is not, if one is required.

NEED FOR THE PROJECT

The PMPD states; "Only if the market decides that it is likely that a project will be able to generate sufficient revenue from sales of its electricity to cover its costs of construction capital and operating expenses, (fuel, wages, etc.) will a project be built. As a practical matter in these times, that assurance comes in the form of a power purchase agreement (PPA). Without a PPA, a project is unlikely to be constructed." 9-5

This overly simplistic view would be adequate if one was building a Taqueria but in matters of this complexity reasonable people should consider adequate analysis. It is not "the market" that decides on projects of this nature. Clearly the market has expressed its disdain for this project. The people do not want it SDG&E has expressed no interest in the project, the CPUC has made no findings of merit. A more likely scenario is that the developer would conspire with SDG&E to determine if they could profit from the development, the CPUC would then confirm the ratepayers (market) obligation to pay or PPA. This scenario is highly subject to manipulation as demonstrated by the fake energy crisis in 2001 where NRG was billed $281,000,00,0 TWO HUNDRED AND EIGHTY ONE MILLION DOLLARS by the California Attorney General for manipulating the market. http://ag.ca.gov/antitrust/energy/content/money.php

The 2007 IEPR states;

*"*Each investor-owned utility has developed its individual methods to calculate and weigh the criteria, including resource or market value, portfolio fit, credit, viability, transmission impact, debt equivalence, and non-price terms and conditions. Consequently, the criteria are not universally transparent and require a high degree of subjective interpretation and judgment."

and

"The corrosive influence of "moral hazard," where decisions are made by entities that are financially insulated from the consequences of those decisions, should be obvious."

The developer will not likely rely on “sufficient revenue from sales of its electricity to cover its costs” There will probably be a provision that the developer is paid by ratepayers merely for the capacity to generate electricity. This Capacity surcharge will be billed to ratepayers whether the facility operates or not. This surcharge is particularly effective at preventing the development of renewable resources because it is even billed to those who generate their own electricity and it overbuilds the Fossil fuel fired generation capability. So the people who make the responsible choice to generate their own electricity are burdened by paying for fossil fuel fired capacity that they do not use. It is not a need for electricity that drives a developers business decision it is profit. If the developer can profit by constructing the facility, even if it never generates electricity, that is what they will do. It may be in the best interest of the developer to borrow a Billion Dollars spend six hundred million building the facility and then to let it go bankrupt.

“As a practical matter in these times, that assurance comes in the form of a power purchase agreement (PPA). Without a PPA, a project is unlikely to be constructed.” This caveat does not deny that tomorrow or in other “times” whenever this project might be built it may be under different criterion. Tomorrows derivatives, market manipulation or other funding sources may allow this project to be built without additional oversight.

If the Commission is to rely on such a statement to justify overriding the law and the will of the people of California it should at least include **a condition; “Construction is subject to the CPUC approval of a Power Purchase Agreement which compensates the operator only for generation and not for the capacity to generate. The PPA must stipulate that the Greenhouse gas emissions from the facility must be sufficiently below available generation to offset construction greenhouse gas emissions within 5 years of construction”**

The Commission recently extended the licenses of 7 peaker plants. The decision should disclose the impact of these plants on the need for this project.

VARIOUS ISSUES

The CECP would require approximately 517 acre-feet per year (AFY) of recycled water based on continuous operation (at a 40 percent capacity factor). 7.2-3

Is this “recycled water actually ocean water? If so the decision should state so.

4.2-18 states; NOTEWORTHY PUBLIC BENEFITS

"..CECP would facilitate the retirement of existing Encina Power Station Units 1, 2, and 3." Would they be retiring with or without the project?

Has the Commission violated, due process?

Were public Notices factual and did they inform the public of air quality impacts, as related to ambient air quality standards or otherwise? If not, Were intervenor's or the publics civil rights violated in the processing of this application? More Specifically has the process served to preclude informed public participation thereby eliminating the ability to redress the government for grievances?

Were public comments adequately considered?

Did the Commission retain contact information of commenter's to add to them to mailing lists or respond to comments? It appears that the blue comment cards include no provision to obtain commenter’s contact information.

Did Commission participation in the FDOC Hearing before the Air Pollution Control District Hearing Board and subsequent refusal to take Notice of the proceeding in this action prejudice either proceeding and/or serve to violate the Clean Air Act? What is the correct appeal procedure for the Air Districts Determination?

Was I, the public or this proceeding prejudiced by being precluded from Telephonic participation in the evidentiary hearing?

Has the Commission failure to; consider my public comments, respond to my request for written orders, allow me to join other intervenors in briefs, allow me to testify, submit evidence or adequately examine witnesses prejudice this proceeding or violate my Civil Rights.

What other permits or agency determinations are needed for this facility and what is the CEC's authority to administer the other agency responsibilities or override/ignore these agencies.

Have Commission budgetary Resource constraints served to interfere with their ability to adequately consider this application?

Has violation of the 12 month certification process compromised the proceeding or made determinations on which it is based stale?

Is the Commission required to take an affirmative action to extend a certification process beyond the 12 months? Did it do so?

Is the project adequately described? For example is there a second phase planned? Should the second phase be considered in conjunction with this proceeding?

The project is not adequately mitigated for negative air quality impacts including localized effects of Greenhouse gases water vapor, ocean water impacts, Biological impacts, etc. What consideration has the Commission given to localized effects of greenhouse gases? This process does not comport with the Clean Air Act, Clean Water Act, Coastal Zone Management Act, Endangered Species Act, Migratory Bird Act, PORTER-COLOGNE WATER QUALITY CONTROL ACT.

Alternatives technologies are not adequately considered. Alternative technologies can not be adequately considered without the specific operating parameters that could be identified in a Power Purchase Agreement (PPA)?

The project will have a negative effect on renewable resource development and the Renewable Portfolio Standards.

The PMPD has not demonstrated that "The project complies with all applicable requirements of federal, state, and local laws." **§ 25550.5. Required findings; repowering**

FOR THE ABOVE REASONS THE PMPD SHOULD BE DENIED.

Thank you,

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